MM4c: **Partitioning**

6

4.3 x 8 = 34.4

32 + 2.4 = 34.4
(4 x 8) (0.3 x 8)

A quick recap…

MM4c: Partitioning

$$4.3 \times 8 = 34.4$$

$$\{32\} + \{2.4\} = 34.4$$

(4×8) (0.3×8)

2.8 x 5

MM4c: Partitioning

$$4.3 \times 8 = 34.4$$

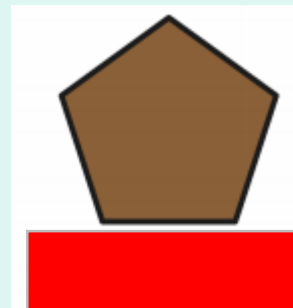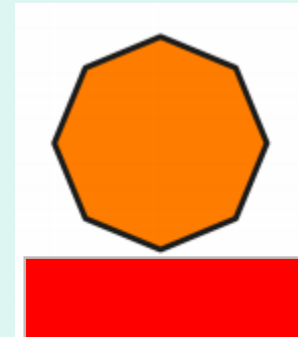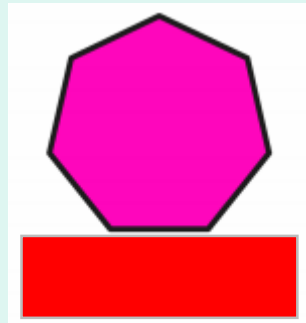$$32 + 2.4 = 34.4$$

(4 x 8)   (0.3 x 8)
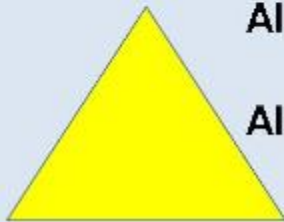
3.4 x 4

4.7 x 6

12.3 x 5

2D Shapes

2 Dimensional

Parallel

Perpendicular

Angles

Polygon

Sides

Vertices

Symmetry

Regular

Irregular

What are the shapes below?
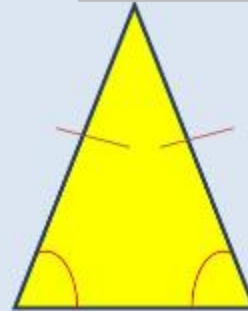*Describe their features using the vocabulary to the left.*
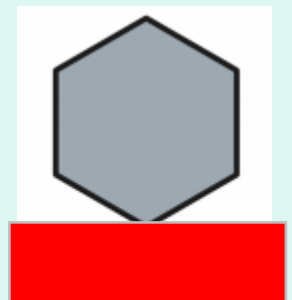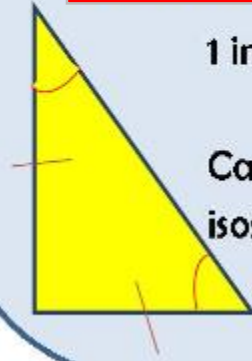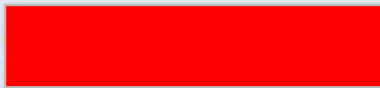
Types of Triangles

All sides the same length
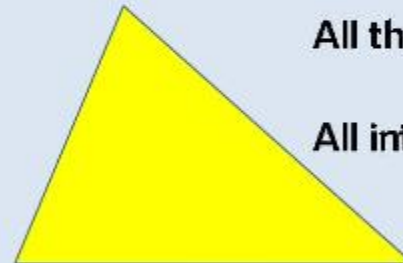
All internal angles the same

2 sides the same length

2 internal angles the same

1 internal angles that is 90°

Can be either scalene or isosceles as well

All the different length

All internal angles different

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Types of Quadrilateral

4 right angles

4 equal sides

Opposite sides are parallel
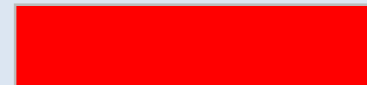
All sides the same length

0 right angles

4 equal sides

Opposite sides are parallel

All sides the same length

0 right angles

2 sets of equal sides

No sides are parallel
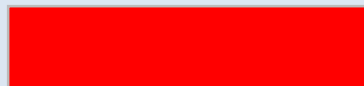
2 pairs of sides the same length

4 right angles

4 equal sides

Opposite sides are parallel
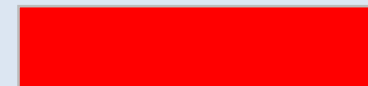
Opposite sides the same length

0 right angles

2 sets of equal sides

Opposite sides are parallel
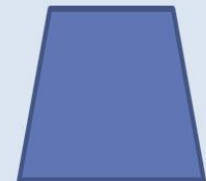
Opposite sides the same length

0 right angles

2 sets of equal sides

1 set of sides are parallel

sides can be any length

What is an angle?

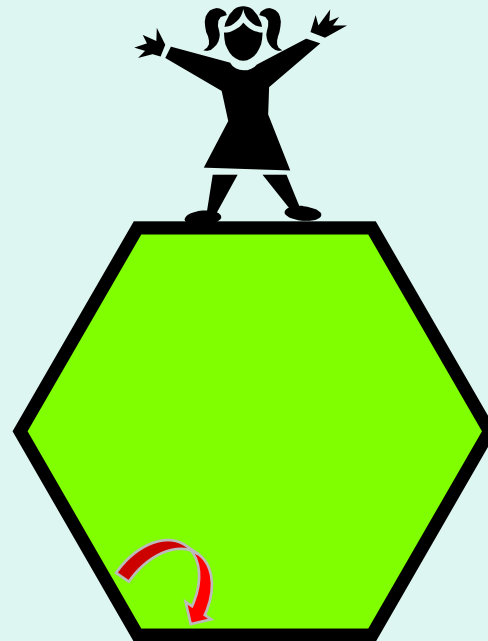**<u>Key Vocabulary</u>**

Interior Angles
Right Angle
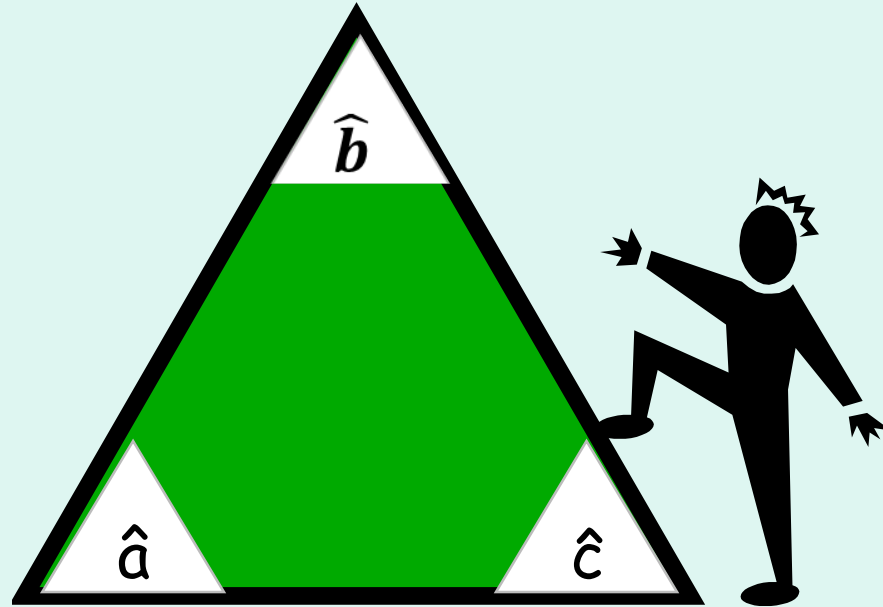Acute Angle
Obtuse Angle
Reflex Angle

Interior angles of polygons

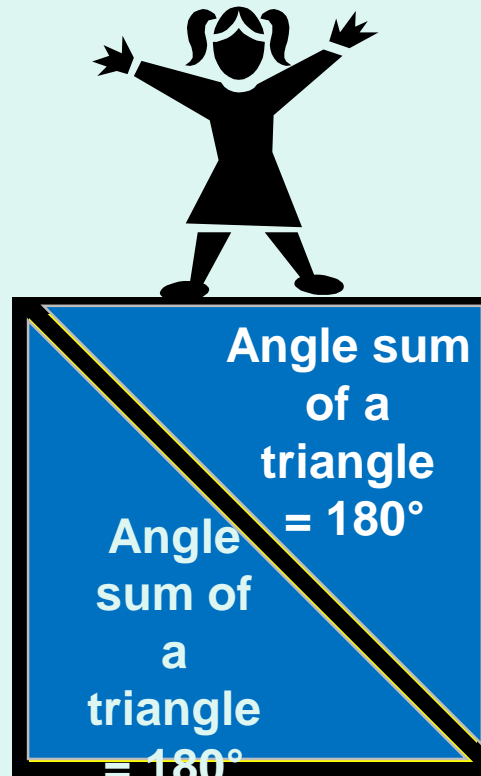This is just one of the six interior angles of this polygon

A polygon with 3 sides is a triangle
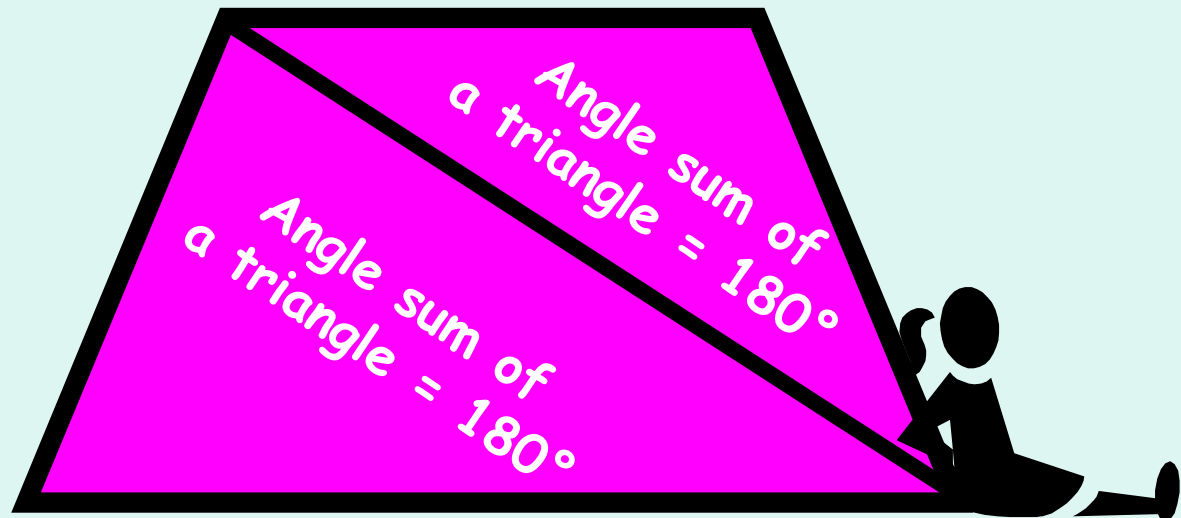

The angle sum of a triangle is 180°

$$\widehat{a} + \widehat{b} + \widehat{c} = 180°$$

What is the angle sum of a quadrilateral?

Angle sum of a triangle = 180°

Angle sum of a triangle = 180°

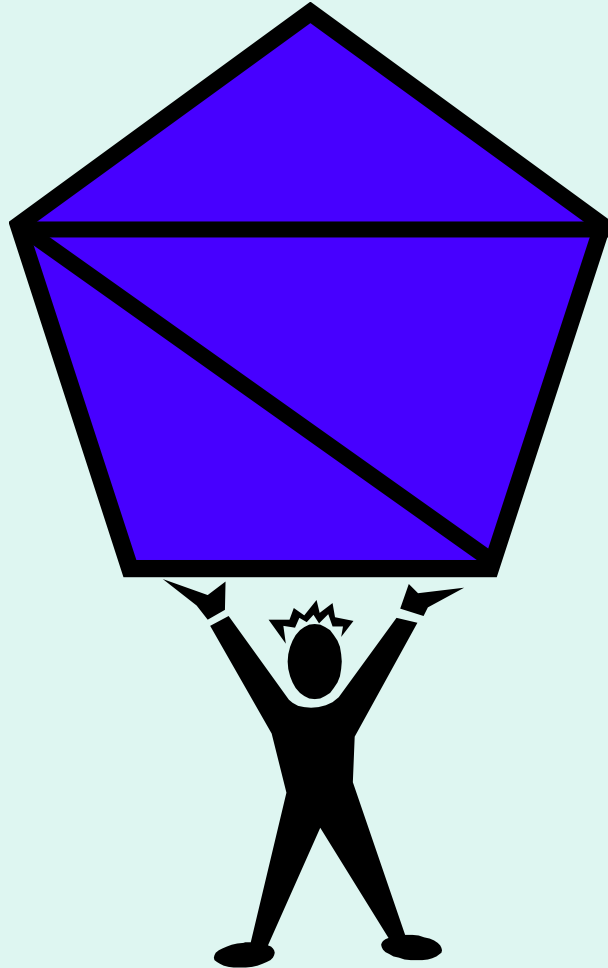The angle sum of a quadrilateral is 360°

Here is a different quadrilateral but the method is the same

The angle sum of a quadrilateral is 360°
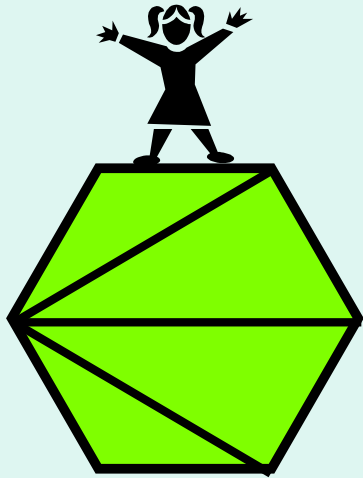
What is the angle sum of a pentagon?

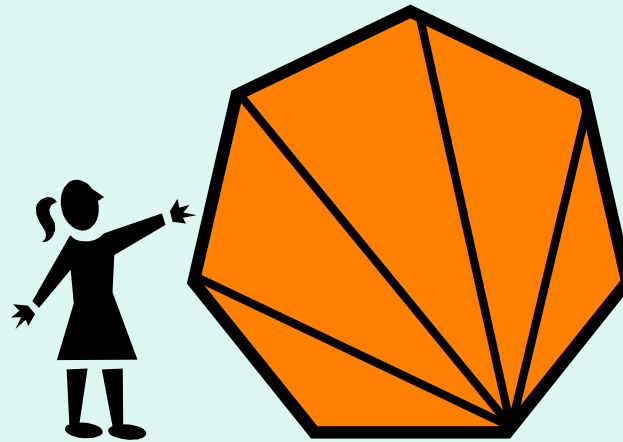**This time you can divide the polygon into 3 triangles**

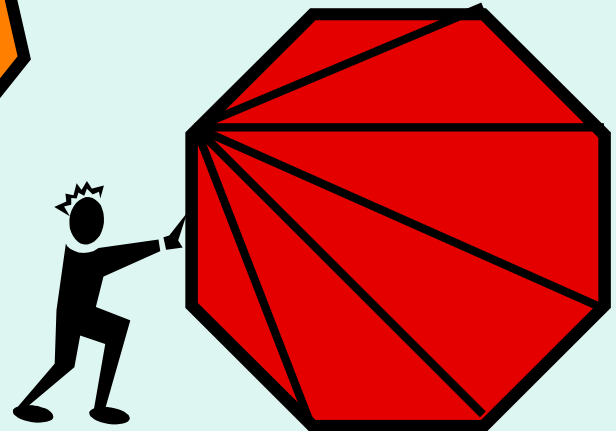$180° \times 3 = 540°$

The angle sum of a pentagon is 540°

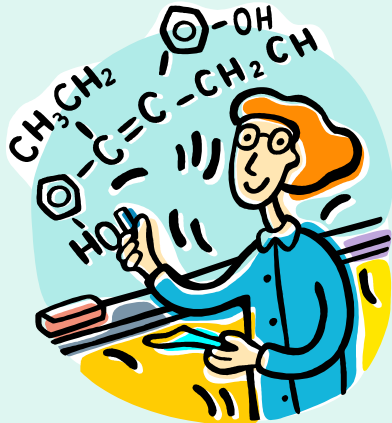# You can find the angle sum of any polygon by dividing it up into triangles

180° x 4 = 720°

180° x 5 = 900°

180° x 6 = 1080°

Finding a formula

What is the formula for finding the angle sum of a dodecagon
(a 12-sided polygon)?

12.

90°
95°
?°
40°
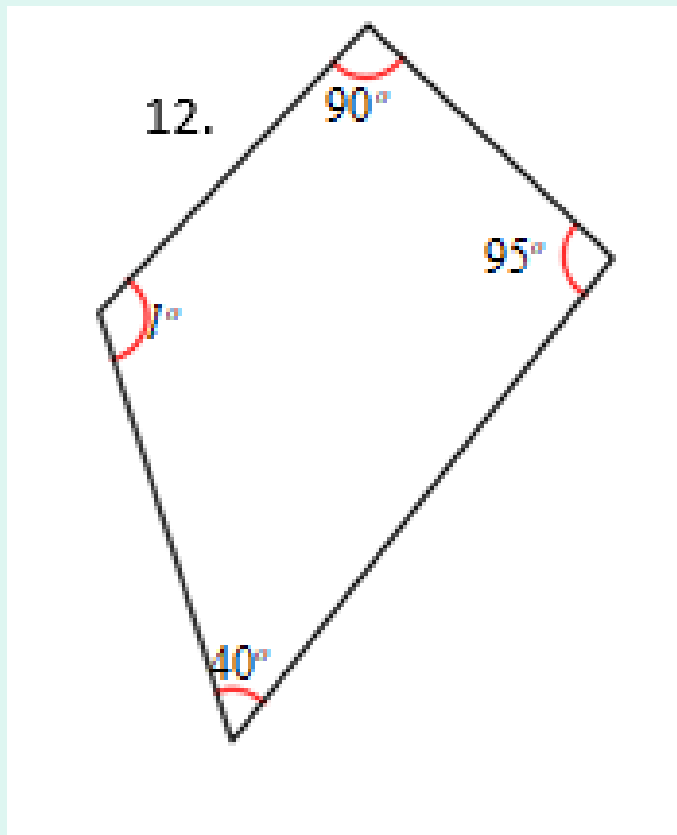
Explain how you know:

_____

_____

_____

_____

Have a go at the task above before taking on either the green, yellow or red challenge!